

General Mason

(Job Role)

Qualification Pack: Ref. Id. CON/Q0103

Sector: Construction

Textbook for Class XI

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
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FOREWORD

The National Curriculum Framework–2005 (NCF–2005) recommends bringing work and education into the domain of the curricular, infusing it in all areas of learning while giving it an identity of its own at relevant stages. It explains that work transforms knowledge into experience and generates important personal and social values such as self-reliance, creativity and cooperation. Through work one learns to find one's place in the society. It is an educational activity with an inherent potential for inclusion. Therefore, an experience of involvement in productive work in an educational setting will make one appreciate the worth of social life and what is valued and appreciated in society. Work involves interaction with material or other people (mostly both), thus, creating a deeper comprehension and increased practical knowledge of natural substances and social relationships.

Through work and education, school knowledge can be easily linked to learners' life outside the school. This also makes a departure from the legacy of bookish learning and bridges the gap between the school, home, community and workplace. The NCF–2005 also emphasises on Vocational Education and Training (VET) for all those children, who wish to acquire additional skills and/or seek livelihood through vocational education after either discontinuing or completing their school education. VET is expected to provide a 'preferred and dignified' choice rather than a terminal or 'last-resort' option.

As a follow-up of this, NCERT has attempted to infuse work across subject areas and also contributed in the development of the National Skill Qualification Framework (NSQF) for the country, which was notified on 27 December 2013. It is a quality assurance framework that organises all qualifications, according to levels of knowledge, skills and attitude. These levels, graded from one to ten, are defined in terms of learning outcomes, which the learner must possess regardless of whether they are obtained through formal, non-formal or informal learning. The NSQF sets common principles and guidelines for a nationally recognised qualification system covering schools, vocational education and training institutions, technical education institutions, colleges and universities.

It is under this backdrop that Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal, a constituent of

NCERT, has developed learning outcomes based modular curricula for vocational subjects from Classes IX to XII. This has been developed under the Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education of the Ministry of Education, erstwhile Ministry of Human Resource Development.

This textbook takes care of generic skills embedded in various job roles in a comprehensive manner and also provides more opportunities and scope for students to engage with these common and necessary skills, such as communication, critical thinking and decision making in different situations pertaining to different job roles.

I acknowledge the contribution of the development team, reviewers and all institutions and organisations, which have supported in the development of this textbook.

NCERT would welcome suggestions from students, teachers and parents, which would help us to further improve the quality of the material in subsequent editions.

New Delhi
September 2020

HRUSHIKESH SENAPATY
Director
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ABOUT THE TEXTBOOK

Construction sector in India is considered to be the second largest employer and contributor to economic activity, after agriculture sector. This sector employs more than 44.08 million people in the country. Around 50 per cent of the demand for construction activities in India comes from the infrastructure sector, while the rest comes from industrial activities, residential and commercial development, etc. The construction industry accounts for about 11 per cent of India's GDP. The Planning Commission estimates that the construction sector will require another 47 million people in the workforce over the next decade.

There is a need for formal training for construction workers. This book contains chapters for imparting knowledge and skills on various aspects of the construction technology. It also includes information, exercises and assessment activities.

This textbook has been developed with the contribution of subject experts, vocational teachers, industry experts and academicians for making it a useful and inspiring teaching-learning resource material for the vocational students. Adequate care has been taken to align the content of the textbook with the National Occupational Standards (NOS) for the job role so that the student acquires the necessary knowledge and skills as per performance criteria mentioned in the respective NOS of the Qualification Pack (QP). The NOS for the job role of 'General Mason' covered through this textbook are as follows:

1. CON/N0110: Construct masonry structures using brick and block
2. CON/N0111: Execute plaster on internal and external surfaces of masonry and RCC structure
3. CON/N0112: Carry out waterproofing works for structures using cementitious materials
4. CON/N0113: Build structures using random rubble masonry
5. CON/N0114: Carry out IPS and Tremix flooring
6. CON/N8001: Work effectively in a team to deliver desired results at the workplace
7. CON/N8002: Plan and organise work to meet expected outcomes

Unit 1 of the textbook gives introduction to stone masonry. Unit 2 focusses on brick masonry. Unit 3 deals with plastering work. Unit 4 is on precast block masonry. Unit 5 deals with the waterproofing work of different structures.

We extend our gratitude to all the contributors for selflessly sharing their precious knowledge, acclaimed expertise and valuable time and positively responding to our request for the development of this textbook.

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